commencing construction, however, applicants must notify the Commission in writing they plan to begin construction at their own risk.

(g) A launch authorization and station license (i.e., operating authorrty) must be applied for and granted before a space station may be launched and operated in orbit. Request for launch authorization may be included in an application for space station license. However, an application for authority to launch and operate an on-ground spare satellite will be considered to be a newly filed application for cut-off purposes, except where the space station to be launched is determined to be an emergency replacement for a previously authorized space station that has been lost as a result of a launch failure or a catastrophic in-orbit fail-

[56 FR 24016, May 28, 1991, as amended at 61 FR 4366, Feb. 6, 1996; 61 FR 9951, Mar. 12, 1996; 61 FR 55582, Oct. 28, 1996; 62 FR 5927, Feb. 10, 1997; 62 FR 64172, Dec. 4, 1997]

## §25.114 Applications for space station authorizations.

(a) A comprehensive proposal shall be submitted for each proposed space station on FCC Form 312, Main Form, together along with attached exhibits as described in paragraph (c) of this section. If an applicant is proposing more than one space station, information common to all space stations may be submitted in a consolidated system proposal.

(b) Each application for a new or modified space station authorization must constitute a concrete proposal for Commission evaluation, although the applicant may propose alternatives that increase flexibility in accommodating the satellite in orbit. Each application must also contain the formal waiver required by Section 304 of the Communications Act, 47 U.S.C. 304. The technical information for a proposed satellite system need not be filed on any prescribed form but should be complete in all pertinent details. The format of the applications should conform to the specifications of §1.49 of this chapter.

(c) The following information in narrative form shall be contained in each application:

- (1) Name, address, and telephone number of the applicant;
- (2) Name, address, and telephone number of the person(s), including counsel, to whom inquiries or correspondence should be directed;
- (3) Type of authorization requested (*e.g.*, launch authority, station license, modification of authorization);
- (4) General description of overall system facilities, operations and services;
- (5) Radio frequencies and polarization plan (including beacon, telemetry, and telecommand functions), center frequency and polarization of transponders (both receiving and transmitting frequencies), emission designators and allocated bandwidth of emission, final amplifier output power (identify any net losses between output of final amplifier and input of antenna and specify the maximum EIRP for each antenna beam), identification of which antenna beams are connected or switchable to each transponder and TT&C function, receiving system noise temperature, the relationship between satellite receive antenna gain pattern and gain-to-temperature ratio and saturation flux density for each antenna beam (may be indicated on antenna gain plot), the gain of each transponder channel (between output of receiving antenna and input of transmitting antenna) including any adjustable gain step capabilities, and predicted receiver and transmitter channel filter response characteristics;
- (6)(i) For satellites in geostationarysatellite orbit, orbital location, or locations if alternatives are proposed, requested for the satellite, the factors that support such an orbital assignment, the range of orbital locations from which adequate service can be provided and the basis for determining that range of orbital locations, and a detailed explanation of all factors that would limit the orbital arc over which the satellite could adequately serve its expected users;
- (ii) For satellites in non-geostationary-satellite orbits, the number of space stations and applicable information relating to the number of orbital planes, the inclination of the orbital plane(s), the orbital period, the apogee, the perigee, the argument(s) of

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perigee, active service arc(s), and right ascension of the ascending node(s); and

- (iii) For 1.6/2.4 GHz Mobile-Satellite Service space stations, the feeder link frequencies requested for the satellite, together with the demonstration required by §25.203 (j) and (k);
- (7) Predicted space station antenna gain contour(s) for each transmit and each receive antenna beam and nominal orbital location requested. These contour(s) should be plotted on an area map at 2 dB intervals down to 10 dB below the peak value of the parameter and at 5 dB intervals between 10 dB and 20 dB below the peak values, with the peak value and sense of polarization clearly specified on each plotted contour:
- (8) A description of the types of services to be provided, and the areas to be served, including a description of the transmission characteristics and performance objectives for each type of proposed service, details of the link noise budget, typical or baseline earth station parameters, modulation parameters, and overall link performance analysis (including an analysis of the effects of each contributing noise and interference source);
- (9) For satellites in geostationarysatellite orbit, accuracy with which the orbital inclination, the antenna axis attitude, and longitudinal drift will be maintained;
- (10) Calculation of power flux density levels within each coverage area and of the energy dispersal, if any, needed for compliance with §25.208;
- (11) Arrangement for tracking, telemetry, and control;
- (12) Physical characteristics of the space station including weight and dimensions of spacecraft, detailed mass (on ground and in-orbit) and power (beginning and end of life) budgets, and estimated operational lifetime and reliability of the space station and the basis for that estimate;
- (13) Detailed information demonstrating the financial qualifications of the applicant to construct and launch the proposed satellites. Applications shall provide the financial information required by §25.140 (b) through (e), §25.142(a)(4), or §25.143(b)(3), as appropriate;

- (14) A clear and detailed statement of whether the space station is to be operated on a common carrier basis, or whether non-common carrier transactions are proposed. If non-common carrier transactions are proposed, describe the nature of the transactions and specify the number of transponders to be offered on a non-common carrier basis:
- (15) Dates by which construction will be commenced and completed, launch date, and estimated date of placement into service;
- (16) Public interest considerations in support of grant;
- (17) Applications for authorizations for domestic fixed-satellite space stations shall also include the information specified in §25.140;
- (18) Applications for authorizations in the Radiodetermination Satellite Service shall also include the information specified in §25.141;
- (19) Applications for authorizations in the Mobile-Satellite Service in the 1545–1559/1646.5–1660.5 MHz frequency bands shall also provide all information necessary to comply with the policies and procedures set forth in Rules and Policies Pertaining to the Use of Radio Frequencies in a Land Mobile Satellite Service, 2 FCC Rcd 485 (1987) (Available at address in §0.445 of this chapter.);
- (20) Applications to license multiple space station systems in the non-voice, non-geostationary mobile-satellite service under blanket operating authority shall also provide all information specified in §25.142; and
- (21) Applications for authorizations in the 1.6/2.4 GHz Mobile-Satellite Service shall also provide all information specified in §25.143.
- (d) Applicants requesting authority to launch and operate a system comprised of technically identical, nongeostationary satellite orbit space stations may file a single "blanket" application containing the information specified in paragraph (c) of this section for each representative space station.

[62 FR 5927, Feb. 10, 1997]